

REPORT ON A ZOOLOGICAL COLLECTION FROM BRITISH NEW GUINEA.

THE following Report deals with certain Reptiles, Batrachians, Fishes, and Insects forwarded for identification to the Australian Museum by Sir William Macgregor, K.C.M.G., Administrator of British New Guinea, who had caused them to be collected in the St. Joseph's River District ; this river flows into the Papuan Gulf opposite to Yule Island, about eighty miles to the north-west of Port Moresby, and is said to take its rise in the range which culminates to the eastward in Mount Yule.

PART I.

REPTILES, BATRACHIANS, AND FISHES.

BY J. DOUGLAS OGILBY.

This portion of the collection contained in all nineteen species, belonging to twelve genera ; these are divided as follows :—one Emydosaurian (*Crocodilus*) : six Lacertilians (*Lialis* 1, *Gonycephalus* 2, *Lygosoma* 3) : three Ophidians (*Morelia* 1, *Brachysoma* 1, *Acanthophis* 1) : one Batrachian (*Hyla* 4) : and four genera of Fishes (*Eleotris* 2, *Salarias* 1, *Plotosus* 1 : *Syngnathus* 1).

Unfortunately all the Fishes and two of the Batrachians were too young to be recognizable.

Full particulars are given below :—

REPTILIA.

EMYDOSAURIA.

This Order is represented by a single young example of *Crocodilus porosus*, Schn.

LACERTILIA.

The Lacertilian Reptiles are represented by six species, and comprise a *Lialis*, two species of *Gonycephalus*, and three of *Lygosoma*. Of the correct identification of neither species of *Gonycephalus* am I absolutely certain, but I consider it preferable to name them as below, those being the species to which indubitably they are most nearly allied, than to risk a possible multiplication of synonyms by describing them as new. In this uncertainty, however, I have thought it advisable to describe both species in detail, so as to afford an opportunity to herpetologists of forming their own opinion as to the identity, or otherwise, of the species under consideration. The Skinks are also interesting, inasmuch as it has been found necessary to describe one new species, while,

from an examination of the type specimens, I am enabled to restore the earlier name of *L. bicarinatum* (Macleay) to the species described under the name of *L. albertisii* (Peters & Doria) by Mr. Boulenger (Brit. Mus. Cat. (Ed. 2) iii. p. 286), who, however, suggested the probable identity of the two forms; it is in any case a most variable species, and the two diagnoses quoted might well be described as the poles of the species, but leading insensibly by numerous intervening grades from the soberly attired *L. bicarinatum* to the handsomely marked *L. albertisii*. The species described as *L. atrogularis* is noteworthy as having a possibly sexual difference in coloration, the adult males (?) being provided with a black chin and throat, while the females, (?) and probably the young males, have these parts merely spotted. It is somewhat remarkable that no less than two of the three Skinks belong to the small section of Duméril and Bibron's genus *Liolepisma*, characterized by the presence of four fingers and five toes, and a single frontoparietal followed by a small interparietal, so that northern Australia and Papuasia appear to be the metropolis of this section of the genus *Lygosoma*. In connection with the marked variability in this species I am more than ever inclined to believe that *L. tetradactylum* (O'Shaughn.), *L. pectorale* (DeVis), and *L. maccoeyi* (Rms. & Ogl.), are correlative varieties of an allied species.

LIALIS BURTONI.

Lialis bicalcarata, *Gray*, *Brit. Mus. Cat. Lizards*, p. 69 (1845).

While temporarily accepting Mr. Boulenger's dictum that the various forms of *Lialis* hitherto described "should be united into one species," I may remark that, setting aside the wide differences in color, the equally marked variation in the length and tenuity of the snout appears sufficiently important to justify the retention of at least two of Dr. Gray's species. Our New Guinea specimen agrees most closely with Mr. Boulenger's "Var. H", but it possesses a distinct, though narrow, cream-colored lateral band, extending from the angle of the mouth to the tip of the tail.

GONYOCEPHALUS MODESTUS.

Gonyocephalus (Hypsilurus) modestus, *Meyer*, *Mon. Berl. Ac.* 1874, p. 130.

Snout pointed, equal to, or a little longer than, the diameter of the orbit; nostril lateral much closer to the tip of the snout than to the eye; canthus rostralis and supraciliary edge acute and projecting; tympanum distinct, oval, its greatest diameter as large as the eye-opening; interorbital space deeply concave; upper head-scales small, keeled, not enlarged on the supraorbital region; canthus rostralis and supraciliary edge with a row of enlarged, elongate, strongly keeled, raised scales, overlapping one another on the inside, and decreasing posteriorly to the

normal size ; occipital scale enlarged ; most of the lateral scales of the head enlarged, smooth ; a single enlarged granular scale present or absent below the tympanum ; eleven or twelve upper, and nine or ten lower labials, each row bordered by a series of enlarged smooth scales. Gular sac moderate, with no enlarged scales in front ; gular scales small and granular, very much smaller than the ventrals. Nuchal crest formed of five low widely separated triangular scales, the anterior one situated above the centre of the tympanum, its height about one-fourth of the length of the snout ; dorsal crest represented by a series of slightly enlarged keeled scales ; dorsal scales small and keeled, the points being directed upwards and backwards ; ventral scales much larger, triangular, keeled. Limbs with strongly keeled scales of unequal size ; fourth finger a little longer than the third ; the adpressed hind limb reaches to the anterior margin of the eye or a little further. Tail feebly compressed anteriorly, more strongly so posteriorly, the serrated upper ridge not extending beyond the anterior third ; it is long and tapering ; all the caudal scales are keeled, and grow larger posteriorly ; the lower series the largest, longer than broad, those on the front part terminating in a strong spine ; tail long and tapering, its length from two and two-fifths to two and three-fifths of that of the head and body. *Colors*—Head greenish-olive, the forehead, supraciliary ridge, sides of neck, and upper edge of gular sac dark purplish-brown ; lower edge of gular sac pale yellow or green, all the intervening space with bands of bright yellow and black ; enlarged subtympanal scale yellow ; nuchal region green marbled with purple ; nuchal crest pale blue or brown ; body from shoulder to groin, and upper surface of fore limbs, pale green, the latter faintly cross-banded with yellow ; lower surface greenish-white clouded with pale brown ; hind limbs above and entire tail purplish-brown, with or without light bands.

From the examination of the five specimens forwarded, the above would appear to be the most common coloration, but on two of the specimens the general color is purplish-brown with scarcely a trace of green, one of these being entirely without cross-bands on the limbs and tail, while on the second these markings are much accentuated, forming distinct annuli on the tail ; in both, however, the coloration of the gular sac and the subtympanal scale is constant.

			Inches.		Millim.
Total length...	...	...	12.80	...	320
Length of head	...	...	.95	...	24
Width of head	...	...	.56	...	14
Length of body	...	...	2.70	...	67
Length of fore limb...	...	...	2.00	...	50
Length of hind limb	...	...	3.25	...	81
Length of tail	...	...	9.15	...	229

The subtympanal scale is absent in one specimen only, and as the gular sac is both much smaller and much less brightly colored in the same individual, it is at least possible that these may be sexual characters.

GONYOCEPHALUS DIOPHUS?

Lophyrus dilophus, *Dum. & Bibr., Herp. Gen.* iv. p. 419, pl. xlvi.

Snout rather pointed, shorter than the diameter of the orbit; nostril lateral, much nearer to the tip of the snout than to the eye; canthus rostralis and supraciliary edge projecting; tympanum distinct, round, not nearly so large as the eye-opening; upper head scales small, keeled, more strongly so on the supraorbital region, along the inner margin of which there is a semicircular row of enlarged scales; an oval band of enlarged raised scales on the middle of the snout, the keeling of which is radiate; the occipital region is bounded on all sides except the anterior by a raised ridge; it is arecate behind, and similar in shape and size to the upper surface of the snout, and the enlarged occipital scale is situated near its hinder margin; most of the scales between the orbit and the tympanum, and an interrupted row round the tympanum much enlarged; a row of enlarged keeled scales bordering the upper labials; eleven or twelve upper and a similar number of lower labials; a row of enlarged scales from the mental shield to beyond the angle of the mouth, anteriorly smooth and forming a suture with the first four lower labials, posteriorly strongly keeled and separated from those shields by from one to four rows of smaller scales. Gular sac large, with five large foliate scales in front; gular scales small, much smaller than the ventrals, strongly keeled, with a few scattered enlarged ones intermixed on the sides. Nuchal crest not continuous with the dorsal, formed of four large blunt foliaceous scales, with a few much smaller and more pointed ones in front, and with several rows of enlarged lateral basal scales of unequal size, the anterior of which are keeled, the posterior smooth; its height is five-ninths of the length of the snout; dorsal crest formed of equal sized foliaceous scales, similar to, but a little lower than, the nuchal crest. Dorsal scales small, strongly keeled, the points being directed upwards and, in a lesser degree, backwards; enlarged pyramidal scales on the sides, forming irregular vertical series; ventral scales much larger than the dorsals, strongly keeled. Limbs with keeled scales of unequal size; fourth finger a little longer than the third; the adpressed hind limb reaches beyond the snout. Tail strongly compressed, with an upper series of enlarged scales similar, and on its anterior half equal in size, to those forming the dorsal crest; all the caudal scales keeled, the inferior series largest and elongated, with their keels terminating in a strong sharp spine; tail of moderate length, with an abruptly truncated tip, once and two-thirds of that of the head and body.

Colors—Greenish-olive above, the enlarged tubercles lighter than the ground color; back, tail, and upper surface of the limbs with numerous purplish cross-bands; gular sac purple with a lighter inferior margin; lower surface yellow, in some places clouded with brown.

			Inches.	Millim.
Total length...	...	...	10·40	260
Length of head	...	...	1·20	30
Width of head	...	...	0·73	18
Length of body	...	...	2·70	67
Length of fore limb...	...	...	2·22	55
Length of hind limb	...	...	3·93	98
Length of tail	...	...	6·50	163

One specimen only is in the collection, and I am in considerable doubt as to whether I have correctly identified the species.

LYGOSOMA (*Liolepisma*) BICARINATUM.

Heteropus bicarinatus, *MacLay*, *Proc. Linn. Soc. N.S.W.* ii. 1877, p. 68.

? *Heteropus bicarinatus*, *Bly.*, *Catal. Liz. (Ed. 2)* iii. p. 286.

Heteropus albertisii, *Peters & Doria*, *Ann. Mus. Gen.* xiii. 1878, p. 362.

Lygosoma albertisii, *Bly.*, *loc. cit.*

Colors—Upper surface of head uniform brown, the sides yellowish profusely ornamented with black spots; back and sides brown with numerous darker and lighter spots; tail light reddish-brown with a series of transverse black spots superiorly, and a few lateral spots, which are more numerous near the base; under surface yellow, the tail with a reddish tinge, the chin and throat with a few scattered black spots; (*L. bicarinatum*.)

Colors—Upper surface of head brown, with or without a few scattered black spots, the sides yellow, clouded with light brown or with a few spots; back olive-brown with scattered black spots, and with or without two narrow faint longitudinal light bands; sides with two yellow black-edged longitudinal bands, separated by a broader black or dark brown band, which commences at the nostril, and, passing through the orbit, is continuous to the very tip of the tail; rest of tail as in *L. bicarinatum*; under surface uniform yellow; (*L. albertisi*).

Of the ten specimens now before me four belong to the latter form and three to the former, while the remaining three, though differing considerably *inter se*, are distinctly intermediate between the two described, which may therefore be taken to be the extreme forms of the species; there is not the slightest difference in even minutest details of outward structure.

Sir William MacLay's types, which are now deposited in the Museum of the Sydney University, have been personally examined and compared with our recent specimens.

LYGOSOMA (*Liolepisma*) ATROGULARE, *sp. nov.*

Habit lacertiform and rather robust : the distance between the end of the snout and the fore limb is contained from once and one-sixth to once and one-third in male (?), and from once and one-third to once and one-half in female (?) specimens, in the distance between the axilla and groin. Snout of moderate length, obtuse. Lower eyelid with an undivided transparent disc. Nostril pierced in a nasal which is sometimes divided at its postero-superior angle, sometimes with a deep groove posteriorly : no supranasals : frontonasal much broader than long, hexagonal, forming a broad truncate suture with the rostral and a truncate or rounded one with the frontal ; prefrontals of moderate size, sometimes forming a suture with the second upper labial : frontal pentagonal or hexagonal, abruptly truncate or concave in front, truncate or angular behind, shorter than the frontoparietal, and in contact with the two anterior supraoculars : four supraoculars, the two middle ones the largest and laterally expanded : seven or eight supraciliaries,* the first and the fourth the largest : frontoparietal single, followed by a small interparietal : parietals forming a short median suture behind the interparietal : a pair of enlarged nuchals and a pair of temporals bordering the parietals ; fourth and fifth, or fifth and sixth, upper labials below the eye, the anterior the larger, the posterior separated from the eyelid by a series of small scales. Ear-opening round, about twice the size of the transparent palpebral disc, bordered all round by acute lobules, of which the middle one anteriorly is much the largest. Thirty-six to thirty-eight scales round the middle of the body, the dorsals quinque- the laterals tri-carinate, the ridges being much more marked in young specimens : lateral scales smaller than the dorsals or ventrals : marginal pre-anal scales but slightly enlarged : the median series of scales on the tail both above and below transversely dilated. The hind limb when stretched forward reaches to the axilla or shoulder : fingers four, toes five : subdigital lamella twenty-nine to thirty-four under the fourth toe. Tail from two-thirds to four-fifths longer than the head and body. *Colors*—Head and body dark brown, the latter occasionally with some of the scales black edged ; upper surface of the tail lighter brown, every third or fourth scale of the upper median dilated series with a broad black anterior and white posterior margin, forming together conspicuous double crossbands ; lower half of the sides and under surface of tail pale blue ; upper surface of limbs similar to the back, lower surface salmon color : under surface and sides of the head and the throat black with a strong metallic bluish gloss in the males (?), yellowish-white with a light blue gloss in the females (?), the labials and

* In one example there are only six supraciliaries, the fourth being greatly enlarged, and formed by its fusion with the fifth and sixth.

sometimes the throat in the latter with round or longitudinally elongate black spots.

The number of specimens at my disposal is not sufficient to warrant an anatomical dissection of two examples, with the view of verifying the sex, but, judging from analogy, I consider that the black-throated specimens are the adult males. Except where special mention is made there is absolutely no difference between the two forms.

The specimens examined measured from three and one-third to eight inches.

			Inches.	Millin.
Total length ...	...	...	7·40	185
Length of head...	...	...	0·65	16
Width of head ...	...	...	0·48	12
Length of body...	...	...	2·10	52·5
Length of fore limb	...	...	0·97	24
Length of hind limb	...	...	1·45	36
Length of tail ...	...	...	4·67	116·5

The above are the dimensions of an adult male (?).

LYGOSOMA (*Emoa*) BAUDINI.

Mabouya baudinii, *Gray*, *Catal.* p. 95.

Several specimens of this Skink are in the collection.

OPHIDIA.

The Ophidian Reptiles included in the collection are unfortunately but few in number, four specimens only, belonging to three genera, having been forwarded; they are, however, of no little interest. Of the Carpet Snake (*Morelia variegata*) there are two examples, an adult and a young one, the latter being described below, as I do not know of any description of the species in this stage: it appears to be the common Python of south-eastern New Guinea as there are several specimens in the Macleay Museum from Katow. The second species represented consists of a fine example of the rare *Brachysoma triste*, now, so far as can be ascertained, recorded for the first time from New Guinea, and interesting as affording another proof of the close alliance between the fauna of northern Australia and that of southern New Guinea: and lastly of a very handsome *Acanthophis* which is provisionally referred to the species described by Sir Wm. Macleay from New Guinea. It has in any case been considered advisable to give a detailed description here of this supposed species, and an attempt made to point out the differences between what may be called the northern and southern forms of this anomalous genus, which differences, should they prove constant, would, even though slight, suffice to constitute a valid species. The types of *A. levis*, Macleay, from Katow, New Guinea, and of *A. praelongus*, Ramsay, from

Somerset, Cape York, have been carefully compared with the present example and with a series of *A. antarcticus* from New South Wales.

MORELIA VARIEGATA.

Gray, *Brit. Mus. Catal.* p. 86.

Scales in from forty-two to forty-eight series round the middle of the body; abdominal plates from two hundred and sixty-seven to two hundred and seventy-one; anal plate single; subcaudal plates in two rows from seventy-seven to seventy-nine in each. body elongate and compressed; head very distinct from the trunk, flattened superiorly; tail short, sharply defined from the body, the upper surface and sides rounded, the lower surface flat, prehensile; muzzle short, broad, and obtuse; eye lateral, the pupil elliptical and erect. Nostril pierced in a large nasal, which is deeply grooved behind; rostral as high as broad, with a deep oblique pit on either side; three pairs of frontals, the two anterior pairs the larger; behind these there is a longitudinal series of three slightly enlarged scales, the last of which is in contact with a pair of small vertical shields, behind which and partially dividing them is a third shield of similar size which is absent in the larger example; two pre- and three post-oculars; five supraciliaries; the rest of the upper surface and sides of the head covered with numerous irregularly-sized and -shaped scales, the largest being in a series of three on each side above the temporal region; the smallest between these series; twelve or thirteen upper labials, the anterior three pitted, the sixth and seventh entering the eye; seventeen lower labials, the six preceding the last four deeply pitted, the first pair not forming a suture behind the quadrangular mental, the posterior margin of which is not more than one-seventh of the anterior; numerous small elongate, non-imbricate scales between the mental and the first abdominal plate. Scales on the fore part of the body small and elongate, those on the hinder part and tail larger and rhomboidal; the series bordering the abdominal plates larger. Rudiments of hind limb minute, scarcely distinguishable from the surrounding scales; two series of scales between the vent and the first pair of subcaudal plates. *Colors*—Nasal shields, front part of anterior frontals, and rostral ridge violet; inner margin of the two posterior pairs of frontals; a median band from thence broadening out behind so as to cover the three vertical shields; three bands, the outer two originating at the antero-superior angle of the orbit, and joining the transverse occipital band, the middle one narrower and not extending so far back; a band from the nasal shield, through the eye, skirting the upper labials, and curving round behind the temporal region to meet the corresponding band on the occiput, rich purplish-brown; an elongate median and two shorter lateral spots of the same color on the neck; second, third, fourth, and seventh upper, and the

eleventh to thirteenth lower labials with a brown spot ; rest of the head brown above, pale yellow beneath, as is also the ground color of the body and tail ; body with sixty-two irregular and greatly interrupted transverse dark-brown bands, twice or thrice as broad as the interspaces, and frequently broken up into large irregularly-shaped spots ; abdominal shields ornamented with scattered small paler brown spots, which become more accentuated posteriorly ; tail with sixteen much more regular transverse bands and the sub-caudal plates with a narrow sutural dark-brown band.

The larger specimen of the two examined is a rather roughly prepared skin measuring four feet ten inches, of which the tail is about ten inches ; the smaller specimen measures twenty-two inches, the tail being slightly over three inches.

BRACHYSOMA TRISTE.

Glyphodon tristis, *Gnfh.*, *Brit. Mus. Catal. Colubr. Snakes*, p. 211 (1858).

Scales in seventeen series ; abdominal plates one-hundred and seventy-one to one hundred and seventy-nine ; anal plate double ; sub caudal plates in two rows, forty-five to fifty-two in each. Body moderately elongate and cylindrical ; head small, depressed, scarcely distinct from the neck ; tail of moderate length, slightly compressed especially posteriorly, and terminating in an elongate blunt pointed scale ; muzzle short, broad, and obtuse ; eye very small, looking outward and partially upward, the pupil round. Nostril pierced between two nasals, the posterior small ; rostral more than twice as broad as high, rounded or very obtusely angular above ; anterior frontals small, posterior large, sharply bent downward on the side of the head so as to form a broad suture with the second upper labial, and thus replace the loreal ; vertical hexagonal, one-third longer than broad, obtusely angular anteriorly and rather less than rectangular posteriorly, the lateral margins very slightly convergent ; occipitals much longer than the vertical and equally, or less, broad, their length twice their breadth, angular behind ; a rather small supraciliary ; a single preocular entering the upper half of the eye only, the lower half being margined by the large third upper labial ; two small, equal-sized postoculars ; four series of temporal shields, the anterior pair not much larger than the others, the upper in contact with both postoculars, the lower partially dividing the two posterior upper labials ; six upper labials, the third and fourth entering the eye ; six lower labials, the first forming a broad suture behind the triangular mental ; two pairs of elongated chin-shields. *Colors*—Upper surface of head brown, the sides with a tinge of chestnut, especially on the anterior temporal region ; sometimes with a broad light brown collar behind the occipitals ; lower surface pale brown, gradually shading into the dirty yellow of the abdominal region ; dorsal scales nearly black, all the scales with a narrow

brownish-yellow edging, becoming more prominent posteriorly, and giving the appearance of oblique duplicate cross-bands; lateral scales black with a broad white margin; abdominal and sub-caudal scales with a black spot on the outer margin.

The single specimen sent by Sir Wm. Macgregor, measures twenty-six and a half inches, of which the head measures three-fifths of an inch—to the posterior angle of the occipital shield—and the tail three and nine-tenths inches, or about five and three-fourths of the length of the head and body together. A second example, from Somerset, Cape York, in the collection of the Australian Museum, to which it was presented by Walter Powell Esq., differs in no respect whatever from the specimen described above, except in the comparatively longer tail, which is five and two-fifths in the length of the head and body.

The ascertained range of this seemingly uncommon species is North-eastern Australia, (*Günther, sive Macgillivray*), Cape York, (*Ramsay, sive Powell*), and St. Joseph's River, British New Guinea (*Macgregor*).

It should be noted that in the specimen described which has been little more than a month in spirits, there is no trace of the "broad, lighter, brownish collar" mentioned by Drs. Günther and Ramsay, unless the faint chestnut tinge on the anterior temporals are to be taken as an indication of it; also that it is a very handsome snake, and certainly does not merit its specific name.

The only points worth noting in Dr. Günther's original description are that in neither of the specimens now examined does the posterior frontal form a suture with *two* upper labials, nor are the lateral margins of the vertical shield "much convergent."

Since writing the above I have discovered in the Museum Collection a third specimen forwarded by the Rev. S. Macfarlane from South-east Cape, New Guinea, and measuring about thirty-one inches.

ACANTHOPHIS.

The principal differences which I can discern between Sir Wm. Macleay's *A. levii*, and the common Australian Death Adder lie (1) in the slightly weaker carination of the dorsal scales in the former, a character which however is plainly visible at least as far as the middle of the back, both in the single specimen forwarded by Sir William Macgregor, and since returned to him, and the type specimen now deposited in the Museum of the Sydney University; (2) in the much more prominent suborbital shield; (3) in the smaller number (113–117) of abdominal plates; and (4) in the less robust habit of the northern form. It is stated by Mr. Gerard Krefft in his diagnosis of the genus that the nostrils are pierced "between two shields," but in the examination of several specimens belonging to the three described forms I can find but one large nasal shield on each side, near the centre of

which the nostril is pierced, and which is grooved both below and behind the nostril, while similarly in all there are one pre- and two post-oculars, and the eye is separated from the upper labials by two well-developed scales. There is however one difference of importance which leads me to consider the Death Adder of northern Australia as specifically separable from the southern Australian form and from that of New Guinea, namely, the diversity in the shape of the pupil, which is erect and elliptical in *A. antarcticus*, and *A. levis*, but round in *A. praelongus*. In all other respects the three forms differ but slightly.

ACANTHOPHIS LÆVIS.

Acanthophis levis, *Macleay, Proc. Linn. Soc. N.S. Wales*, ii. p. 40 (1877).

Scales in twenty-one series; abdominal plates from one-hundred and thirteen to one-hundred and seventeen; anal plate entire; sub-caudal plates forty-eight to fifty, sometimes all entire, sometimes a part divided. Body short and but moderately robust, this giving it a rather elongate appearance as compared with *A. antarcticus*; head broad, very distinct from the trunk; tail distinct from body, compressed into a blunt keel above, and terminating in a curved spur-like scale, which is bent upwards; muzzle short, broad, and obtuse; eye small, lateral, the pupil elliptical and erect. Nostril pierced in a single large nasal, which extends so far backwards as, in conjunction with the posterior frontal, to replace the loreal shield; rostral about three times as broad as high, rounded behind and extending well on to the upper surface of the head; anterior and posterior frontals well developed, and sub-equal in size; vertical shield large, the anterior facies obtusely angular, the posterior broadly rounded, the lateral margins parallel, or with a slight, scarcely perceptible, convergence; occipitals a little longer than the vertical, and very much broader; supraciliary large, about equal in size to the vertical, the outer margin prominent and erect; a single large preocular; two postoculars, the upper somewhat the larger; two or three enlarged scales between the eye and the upper labials; temporal shields in three series, the lower one of the first pair very large, and completely separating the two posterior upper labials, six upper labials, the third and fifth the largest, the third and fourth beneath the eye; eight lower labials the first forming a broad suture behind the triangular mental, the second and last much smaller than the others; the fourth the largest; two pairs of elongate chin-shields; a large lateral shield bordering the fourth and fifth lower labials. Scales of the head rugose; about ten median series of dorsal scales unicarinate, the carinations extending even so far as the root of the tail, but growing faint posteriorly. *Colors*—Ashy-gray above, white below; some of the upper head-shields washed with chestnut; anterior upper labials closely mottled with black, white, and ash; the two

posterior upper labials, the enlarged temporal, all the lower labials, the mental, the chin shields, and the margino-labial shields beneath white, each with a large black spot ; most of the small scale-like shields between the chin-shields and the abdominal plates with a small round dark spot ; upper surface with thirty-four transverse rows of black spots, each row preceded by a narrow chestnut band, this color predominating on the tail which bears eight rows of the thirty-four ; the outer row of scales on each side black with a narrow white margin ; abdominal and subcaudal plates with numerous brown blotches ; posterior third of tail bright yellow.

Batrachia.

Examples of four species of Tree Frog are included in this section of the collection, but unfortunately all the specimens of two of these are so small and so much shrivelled that I have found it impossible to determine their identity with any of the species in the latest British Museum Catalogue. One of the remaining species is described as new under the name of *Hyla macgregori*.

HYLA DOLICHOIPSIS.

Calamita dolichopsis, *Cope, Journ. Acad. Philad.* (2) vi. p. 204 (1867).

There are a few specimens of this fine Frog in the collection.

HYLA MACGREGORI, *sp. nov.*

Tongue subcordiform, slightly free behind. Vomerine teeth in two small oval oblique patches, behind the level of the choanae. Head small, as broad as long ; snout rounded, slightly longer than the diameter of the orbit ; canthus rostralis distinct ; loreal region nearly vertical, not concave ; interorbital space as broad as the upper eyelid ; tympanum rather indistinct, half the diameter of the eye ; a distinct fold across the chest between the fore limbs. Outer fingers about one-third webbed, the others not so much ; no projecting rudiment of pollex ; toes nearly entirely webbed ; disks of fingers equal in size to the tympanum, much larger than those of the toes ; subarticular tubercles small. The hind limb being carried forward along the body, the tibio-tarsal articulation reaches the tip of the snout. Skin smooth, finely granulate on the belly and under surface of the thighs. *Colors*—Variable, those of the two extreme forms being as follows ; (a) upper surface of head and body dark brown, the former with small yellow spots, the latter with three broad yellow longitudinal bands ; the median band commences generally between the eyes, but is sometimes produced forwards to the tip of the snout, and terminates on the rump ; the lateral bands are broader, commence at the postero-superior angle of the orbit, and terminate abruptly at a point beyond the middle of the sides ; a row of yellow spots between

the bands present or absent ; sometimes a well-marked cross-band on the rump ; sides dark brown with yellow spots ; upper surface of limbs lighter brown with yellow spots, sometimes of moderate size and scattered, but more commonly in small freckles ; lower parts creamy white. The yellow markings are frequently replaced by white ; (b) general color much lighter brown, the yellow or white spots or bands being replaced by pale brown or dirty white ; otherwise as in var. *a*. In some young examples the upper parts are so profusely blotched with white as to almost entirely hide the dark ground color, but as a rule the pattern of coloration as given in the description of var. *a* is not materially departed from.

This Tree Frog appears to be common in the St. Joseph's River district, since no less than twenty-six specimens were sent down by Sir Wm. Macgregor, to whom I have much pleasure in dedicating this handsome species. The largest example measures 30 mm. from snout to vent.

PISCES.

I regret to say that of the ten specimens forwarded all are either too young, or in too bad a condition to admit of accurate specific identification ; they belong however to the following genera :

ELEOTRIS, *sp.*

Two examples of what may possibly be the young of *Eleotris porocephalus*, C.V.

ELEOTRIS, *sp.*

A single very young specimen.

SALARIA, *sp.*

A single very young specimen.

PLOTOSUS, *sp.*

Five specimens, the largest of which is little more than one inch in length ; they are in all probability the young of *P. canius*, Ham. Buch.

SYNGNATHUS, *sp.*

One example, which is perhaps the young of *S. spicifer*, Rüpp.*

* Owing to my non-reception of a second proof of my paper on a new *Tetrodon* (see page 81) the error in the foot-note has been overlooked : my meaning would be better shown thus—read after “dorsal fin,” *which is equal to the distance between that point and the termination of the dorsal fin.*” The *lapsus calami* in the first line of the description, viz. the substitution of “of” for “in” must be apparent to all.

PART II.

COLEOPTERA (*CICINDELIDÆ, CARABIDÆ, AND BUPRESTIDÆ*).

BY THOMAS G. SLOANE.

A portion of the collection of Coleoptera, comprising the *Cicindelidæ*, *Carabidæ*, and *Buprestidæ* has been placed in my hands for determination. These consist of:—

CICINDELIDÆ.

THERATES BASALIS, Dej.; 1 specimen.

TRICONDYLA APTERA, Olivier; 3 specimens.

CARABIDÆ.

PSEUDOZENA TENEBROSA, n. sp.; 1 specimen.

CHALENIUS BINOTATUS, Dej.; 1 specimen.

This species, of which *Ch. maculifer*, Casteln., is a synonym, is also found in Australia, extending as far south as the Clarence River.

PLATYNUS PAPUENSIS, n. sp.; 1 specimen.

PERIGONA ? sp. ?; 1 specimen.

A small black Feronid belonging to the *Platynini*; I am not certain of the genus.

BUPRESTIDÆ.

CYPHOGASTER VENEREA, Thom.; 1 specimen.

The following are descriptions of the two new species of *Carabidæ*.

PSEUDOZENA TENEBROSA, sp. nov.

Black, opaque. Head large, (3×4 mm.), mandibles, labrum, and anterior part of forehead smooth, vertex punctate; clypeal suture lightly marked; eyes prominent, inclosed behind by strong processes, these extending beyond the eyes in a blunt projection; antennæ thick, moniliform, incrassate, joints finely punctate. Prothorax hardly broader than head, transverse, ($2\frac{1}{2} \times 4\frac{1}{4}$ mm.), subcordate; anterior angles rounded, posterior sharply rectangular;

base lightly sinuate on each side, the median part truncate and projecting slightly behind the marginal parts; lateral margins broad and upturned behind, narrower in front, without reflexed border or setigerous punctures; disc rugulose and punctate; an arcuate transverse impression in front; median line lightly marked. Elytra parallel, ovate, ($8\frac{3}{4} \times 5$ mm.), costate; the costæ (8 on each elytron) shining, subequal, not strong or carinate, sparsely and very finely punctate, 8th rather obliterate on the sides, but conspicuous and strongly marked towards the apex; base truncate, declivous; apex subsinuate; marginal border carinate, interrupted towards apex, extending on base to the peduncle, more prominent, though rounded, at humeral angles; border of apex rising at end of lateral border, between it and 8th costa, in a short grooved carina, the inner edge of the groove extending almost to the tips of the elytra; a row of thinly placed shallow umbilical punctures on the sides between 8th costa and border. Under surface thinly covered with short hairs, these hairs placed in rugulose punctures on the legs and segments of abdomen. Anterior tibiae strongly bent on outer edge and very strongly excavate on inner side. Length 15, breadth 5 mm.

PLATYNUS PAPUENSIS, sp. nov.

Male.—Black, shining; undersurface, legs, and antennæ pitchy black. Head small, smooth, a faint impression on each side behind the suture: clypeal suture not visible; mandibles long, acute at apex, scrope without a setigerous puncture; labrum prominent, truncate; clypeus short with a setigerous puncture on each side; eyes prominent; labial palpi with last joint shorter than penultimate, slender, narrowed to apex; maxillary palpi with last joint narrow, elongate, pointed, about equal to penultimate in length. Prothorax transverse, ($1\frac{1}{2} \times 2\frac{1}{4}$ mm.), not convex, rounded on the sides, hardly narrowed behind, anterior margin broadly emarginate, bordered; base with median part truncate, narrowly bordered; anterior angles rounded, posterior angles rounded, but marked; lateral margins narrowed in front, broad and upturned behind; the usual lateral impressions of the base almost obsolete; a setigerous puncture on the edge of the margin at each posterior angle; median line very lightly marked. Elytra broader than prothorax, ($5\frac{1}{2} \times 3\frac{1}{2}$ mm.), rather flat on the disc, declivous towards the sides, sinuate behind, finely striate; the interstices flat, equal, 3rd finely bipunctate on apical half, the punctures near the 2nd stria; 9th sparingly punctate, the punctures interrupted in the middle, an abbreviated stria near scutellum; basal border arcuate behind, continuous with lateral border, this narrowly reflexed. Legs slender; anterior femora short, thickened in the middle, canaliculate below; anterior tibiae distinctly sulcate on outer side, apex with an acute spine projecting forward on inner side, and a shorter

oblique spine externally; tarsi sulcate externally, anterior in male with three basal joints dilatate, and furnished below with an oblique row of squamulae on each side; 4th joint of anterior tarsi decidedly bilobed, of middle emarginate, hardly bilobed, of posterior not emarginate, the projecting hairs on each side equal. Length 9, breadth $3\frac{1}{2}$ mm.

This insect is winged; it does not appear to differ in any character from *Platynus*, but I have described it more fully than usual in regard to features more of generic than specific value, so that its exact position in regard to *Colpoles*, a genus I am unacquainted with, may be evident.
